

We claim:

1. A composition comprising:

a bioabsorbable oligomeric compound that is end-capped with an aromatic diisocyanate;

a trifunctional compound that is end-capped with an aromatic diisocyanate; and

an aromatic diisocyanate.

2. A composition as in claim 1 wherein the bioabsorbable oligomeric compound is a compound having the structure:



wherein A is a bioabsorbable group, n is from 1 to about 6 and X is a residue from a multifunctional initiator.

3. A composition as in claim 2 wherein the bioabsorbable group is a group derived from a monomer selected from the group consisting of glycolic acid, glycolide, lactic acid, lactide, 1,4-dioxane-2-one, 1,3-dioxane-2-one and ϵ -caprolactone.

4. A composition as in claim 2 wherein X is a residue from a multifunctional initiator selected from the group consisting of diols, aromatic and alkyl triols, polyols, alcohol amines, dicarboxylic acids and aromatic dicarboxylic acids

5. A composition as in claim 2 wherein X is a residue from a multifunctional initiator selected from the group consisting of ethylene glycol, diethylene glycol, 1,3-propanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, 1,7-heptanediol, 1,8-octanediol, 1,10-decanediol, 1,12-dodecanediol, 1,2-decanediol, 1,2-dodecanediol, 1,2-hexadecanediol, neopentyl glycol, 3-methyl-1,5-pentanediol, 2-methyl-1,3-propanediol, 2-butyl-2-ethyl-1,3-propanediol, 2-ethyl-3-butyl-1,3-propanediol, 2-ethyl-1,6-hexanediol, glycerol, 1,1,1-trimethylolpropane, neopentyl glycol, pentaerythritol, triethanolamine, 1-aminopropanols, 2-aminopropanols, 2-aminobutanols, 4-aminobutanols, succinic acid, glutaric acid, adipic acid, suberic acid, sebacic acid, dodecanedioic acid, 2-ethyl-2-methylsuccinic acid, phthalic acid, isophthalic acid, and terephthalic acid.

6. A composition as in claim 1 wherein the bioabsorbable oligomer is end-capped with an aromatic diisocyanate selected from the group consisting of 1,4-diisocyanatobenzene, 1,1'-methylenebis[4-isocyanatobenzene], 2,4-diisocyanato-1-methylbenzene, 1,3-diisocyanato-2-methylbenzene, 1,5-diisocyanatonaphthalene, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] and 1,3- and 1,4-bis(1-isocyanato-1-methylethyl)benzene.

7. A composition as in claim 1 wherein the trifunctional compound is selected from the group consisting of glycerol, 1,1,1-trimethylolpropane, neopentyl glycol, pentaerythritol, triethanolamine, 1-aminopropanols, 2-aminopropanols, 2-aminobutanols, 4-aminobutanols.

8. A composition as in claim 1 wherein the trifunctional compound is end-capped with an aromatic diisocyanate selected from the group consisting of 1,4-diisocyanatobenzene, 1,1'-methylenebis[4-isocyanatobenzene], 2,4-diisocyanato-1-methylbenzene, 1,3-diisocyanato-2-methylbenzene, 1,5-diisocyanatonaphthalene, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] and 1,3- and 1,4-bis(1-isocyanato-1-methylethyl)benzene.

9. A composition as in claim 1 wherein the aromatic diisocyanate is selected from the group consisting of 1,4-diisocyanatobenzene, 1,1'-methylenebis[4-isocyanatobenzene], 2,4-diisocyanato-1-methylbenzene, 1,3-diisocyanato-2-methylbenzene, 1,5-diisocyanatonaphthalene, 1,1'-(1-methylethylidene)bis[4-isocyanatobenzene] and 1,3- and 1,4-bis(1-isocyanato-1-methylethyl)benzene.

10. A method of adhering first and second tissue surfaces, the method comprising:

approximating the first and second tissue surfaces; and

applying to the approximated tissue surfaces a composition of any

of claims 1 through 9.

11. A method of adhering a surgical device to tissue, the method comprising:

applying to the surgical device a composition of any of claims 1

through 9; and

contacting the surgical device with tissue.

12. A method of sealing a defect in tissue, the method comprising:

identifying a tissue site containing a defect; and

applying a composition of any of claims 1 through 9 to the site of
the defect.